

# ROCKVILLE REFUSE/RECYCLING PROGRAM



# ROCKVILLE REFUSE ISSUES

- Resident cost expected to increase from \$29.50/month to \$40.50/month by 2014 (37.3% increase)
- Manual system limits size of waste containers (32-gallon)
- Manual system is labor intensive and promotes worker injuries
- Manual system discourages recycling:
  - Requires curbside recycling, but permits backdoor refuse pickup
  - Program is only achieving a 36% diversion rate; goal is 50%



# INHERENTLY INEFFICIENT

- Labor intensive - refuse workers are required to go into the backyard even if there is no refuse set out
- Not all residents use or want twice-per-week collection, but all are required to pay for it
  - 55% supported once-per-week collection if they had a cart that would hold a weeks worth of garbage
- Current system has too many confusing rules
  - Refuse must be in 32-gal containers weighing less than 50 lbs.
  - Broken glass must be wrapped and clearly marked



# INHERENTLY INEFFICIENT

- Current system requires too much resident preparation time/effort
- Current system often results in trash blowing in neighborhoods on pickup days
- Current system contributes to too much worker confusion and missed collections



# CURRENT BACKDOOR COLLECTION





# CURRENT REFUSE SET OUTS



# R.W. BECK REPORT SCENARIOS

Scenario		Annual Direct Cost Savings
Scenario 1	Eliminate Backdoor	\$119,843
Scenario 2	2x/Week fully-automated	\$2,679
Scenario 3	1x/Week fully-automated	\$209,849
Scenario 4	1x/Week semi-automated	\$278,165
Scenario 5	2x/Week semi-automated	(\$108,756)



# SURVEY RESULTS

- 76% of all respondents supported the elimination of backdoor service if it would help curtail future increases to the refuse charge.
- 68% of all respondents supported switching to an automated collection system and receiving a special cart if would save money.
- 55% of all respondents supported once-per-week collection if they had a specially designed cart that could hold a weeks worth of garbage.





# MAYOR AND COUNCIL GUIDANCE

- During the February 7, 2005 Worksession, staff was asked to develop an implementation plan for elimination of backdoor service and conversion to semi-automated, once-per-week refuse and recycling collection.
- In addition, the Mayor and Council requested volume-based-pricing and financial data for the plan.



# STAFF RECOMMENDATION: PILOT PROGRAM

- Semi-automated once-per-week collection; refuse and recycle on same day
- Curbside refuse and recycling pickup, except for those unable to get carts to the curb
- City to provide 96-gallon refuse cart and 64-gallon mixed paper/cardboard recycle cart
- Retain current 22-gallon commingle recycle bin



# PILOT STUDY AREA

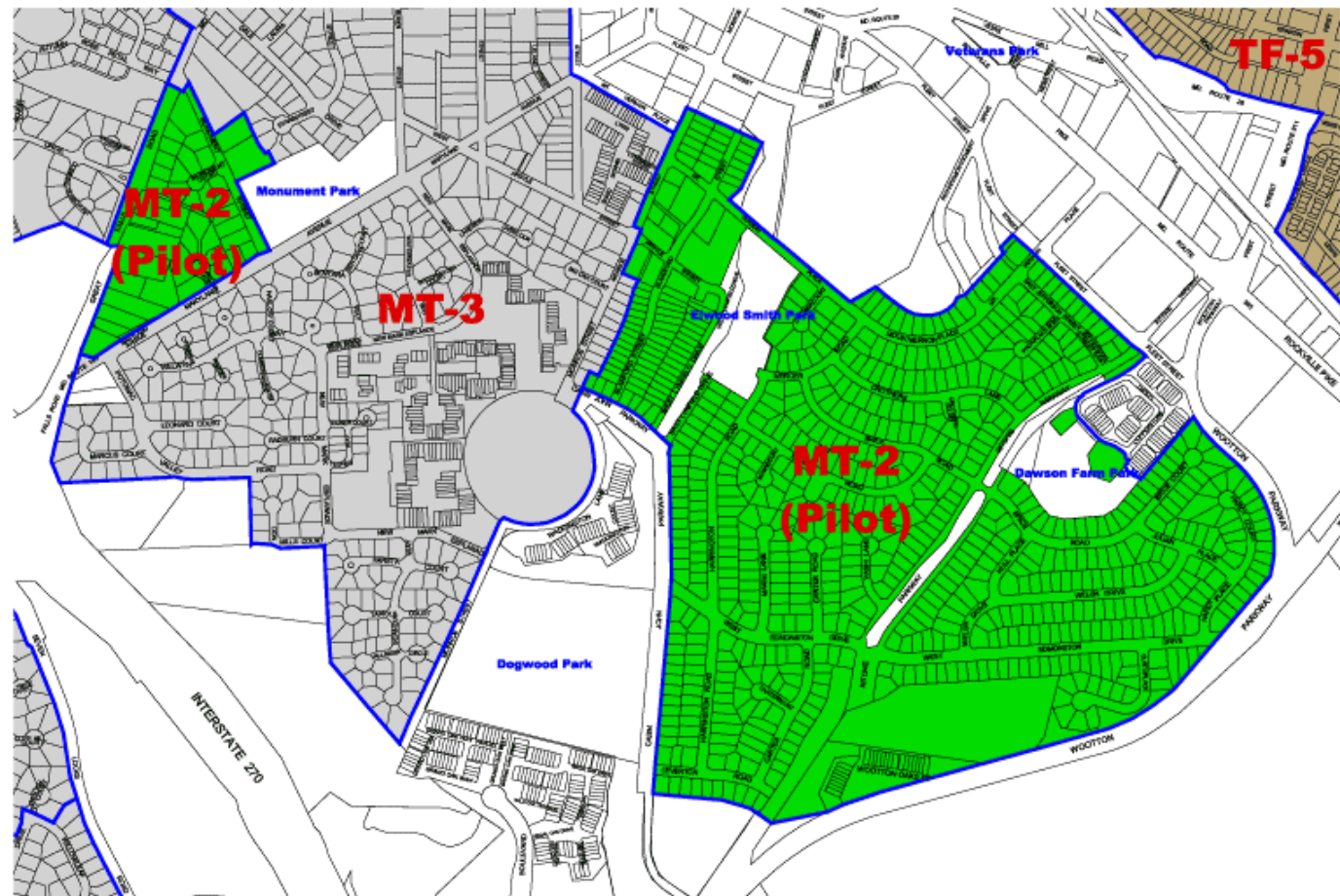
- 778 households in the Hungerford and Monument areas
- Current refuse pickup is Monday and Thursday; current recycle pickup is Monday
- Pilot pickup day will be Monday for refuse and recycle collections; Memorial and Labor Day holiday pickup will be on Wednesday
- No limit on amount of refuse permitted during pilot program; extra refuse can be put in current 32-gallon containers or trash bags



# PILOT STUDY AREA



DPW Refuse Pickup for Route MT-2, Truck 446



# PILOT STUDY GOALS

- Evaluate equipment needs, cart sizes, suitable route size, and staffing levels
- Gauge customer satisfaction through pre and post pilot surveys
- Gather information for future decision on volume-based-pricing
- Determine effect of new program on volume of refuse versus recycling
- Track bulk item collection data for future use





# ADVANTAGES TO RESIDENTS

- Lower refuse rate
- Residents provided carts free of charge; saves out-of-pocket costs
- Better for the environment
  - Cleaner neighborhoods
  - Makes recycling easier; increasing diversion rate
- Less prep time on set out days
- Retain backdoor collection for disabled/elderly at no extra fee



# ADVANTAGES TO CITY

- Carts have 10-year warranty
- Reduced worker injuries
- More cost-effective
  - Lower costs for fuel, personnel, operating, tipping fees, etc.
- Permits volume-based-pricing to encourage recycling and charge fees based upon use
- Better for the environment
  - Cleaner neighborhoods



# TIPPING FEES AT MONTGOMERY COUNTY TRANSFER STATION

Refuse	\$52.00/ton
Yard waste	\$36.00/ton
Commingled containers	\$ 0.00/ton
Recyclable paper/cardboard	\$0.00/ton



# PROJECTED COST SAVINGS

Unit	Change	Description	Amount	Total Annual Cost (Savings)
Refuse Crew	(8)	salary & benefits	\$45,146	(\$361,168)
Refuse Supv	(1)		\$72,641	(\$72,641)
Rearloaders	(5)	annualized capital	\$20,351	(\$101,755)
		O&M - (4)	\$7,000	(\$28,000)
		Fuel - (4)	\$2,200	(\$8,800)
Rearloader cart tippers	7	annualized (refuse)	\$1,760	\$12,320
	6	annualized (recycling)	\$1,760	\$10,560
Carts	14,000	refuse	\$5	\$70,000
	14,000	mixed paper	\$5	\$70,000
	28,000	repair/ replacement	\$1	\$28,000
Total				(\$381,484)



# REFUSE CHARGE COMPARISON

Annual Refuse Rate Comparison										
FY 2007 Cash Flow	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Rate/household/month/FY	\$27.75	\$29.50	\$31.00	\$32.50	\$34.00	\$35.50	\$37.00	\$38.50	\$39.50	\$40.50
Rate Increase	\$1.75	\$1.75	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.00	\$1.00
% Increase	8.82%	6.31%	5.08%	4.84%	4.62%	4.41%	4.23%	4.05%	2.60%	2.53%
FY 2007 w/ Implementation	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Rate/household/month/FY	\$27.75	\$29.50	\$30.50	\$31.25	\$32.00	\$32.75	\$33.50	\$34.00	\$34.50	\$35.00
Rate Increase	\$1.75	\$1.75	\$1.00	\$0.75	\$0.75	\$0.75	\$0.75	\$0.50	\$0.50	\$0.50
% Increase	8.82%	6.31%	3.39%	2.46%	2.40%	2.34%	2.29%	1.49%	1.47%	1.45%





# CURRENT ROCKVILLE REFUSE SET OUT



# TRASH SET OUT UNDER NEW PROGRAM





# TRASH SET OUT UNDER NEW PROGRAM



# PILOT PUBLIC OUTREACH

- Rockville Reports, Rockville Channel 11, City Web site, utility bill stuffer, homeowner and civic association meetings, advisory mailings, and door hangers.
- Modified Collection Services Guidelines and a list of frequently asked questions.
- Small novelty items providing key contact information for questions and concerns.
- Pre/post pilot surveys to gauge satisfaction, including: cleanliness of neighborhood, time to recycle, overall satisfaction with service, ease of getting items to curb.



# TIMELINE

- Short-Term: Implement Pilot Program
  - March to December 2006
- Mid-Term: Implement semi-automated, once-per-week program (with possible volume-based-pricing) citywide
  - July 1, 2007
- Long-Term: Implement fully-automated collection on all feasible routes (anticipate 8 of 20 routes)
  - FY13





# FULLY AUTOMATED COLLECTION

- First opportunity is in FY13 when current fleet begins to be replaced
- Could be more cost effective if personnel costs rise disproportionately to cost of fully automated vehicles or if Montgomery County switches to single-stream recycling (also making recycling a candidate for fully-automated collection)
- Shift from semi-automated to fully-automated would be done route by route as new fully automated vehicles are purchased to replace semi-automated vehicles at the end of their useful life



# VOLUME-BASED-PRICING OPTIONS

- 2 or 3 sized carts (96, 64, 48 and 32/35 gallons available)
- Sell 32-gallon bag/can stickers for occasional extra trash that will not fit in cart
- Tipping Fee is only cost component affected by the volume of refuse set out
- Volume pricing example: Rate difference between 96 and 64 gallon set out is \$3.60 - \$4.50 per month



# CONCLUSION

- Staff recommends implementation of 9-month pilot program beginning March 6, 2006
- Staff will report back to Mayor and Council at the mid-point of the pilot and near the conclusion (November 2006)
- If approved for full city-wide implementation, pilot residents will continue on new program
- Do not need additional money to implement pilot program

